

FUEL SYSTEM COMBINATION VALVE FOR AN INTERNAL COMBUSTION ENGINE AND SUCH A FUEL SYSTEM

Abstract

The invention relates to a combination valve (15) for pressure control and venting in a fuel system for delivering fuel to an internal combustion engine. The valve comprises a primary valve cone (25), which is supported so that it is displaceable between two limit positions in a cylinder bore (24) in a valve housing (23), against the action of a first spring element (26). The displacement of the valve cone from an inoperative limit position into an operative limit position leads to the opening of a connection between an inlet duct (32) and an outlet duct (33) in the valve housing. The valve cone (25) is provided with an inner passage (27), which is designed to accommodate a secondary valve cone (28). This is displaceable between a support surface (29) and a valve seat (30) against the action of a second spring element (31) having a lower spring constant than the first spring element. A displacement of the secondary valve cone against the action of the second spring element (31) leads to the opening of a connection between the in-

let duct (32) and a venting duct (34).